

## CLAIMS

What is claimed is:

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1. A method for transforming character strings that are contained in a computer program, the method comprising the computer-implemented steps of:
    - 2 identifying a hard coded string that is contained in the computer program;
    - 3 replacing the string with a macro that is uniquely associated with the string;
    - 4 creating and storing an entry in a mapping that defines an association of the macro
    - 5 and the string; and
    - 6 referencing the mapping in a program element that is associated with the computer
    - 7 program.
  - 1 2. The method as recited in Claim 1, wherein the step of identifying a string further  
2 comprises the steps of:
    - 3 identifying one or more computer programs that contain one or more hard coded
    - 4 strings; and
    - 5 parsing one of the computer programs to identify the hard coded strings while
    - 6 copying instructions from the one of the computer programs to an output.
  - 1 3. The method as recited in Claim 1, wherein the step of identifying a string further  
2 includes the steps of:
    - 3 parsing a computer program to locate hard coded strings contained therein; and
    - 4 in response to locating a string, determining whether a macro was previously
    - 5 generated for the string; and generating a corresponding macro uniquely
    - 6 associated with the string only when a macro was not previously generated.
  - 1 4. The method as recited in claim 1, wherein the step of identifying a string further  
2 includes the steps of receiving a suggested macro string for the identified string of  
3 characters, and wherein the step of replacing the string of characters with a unique  
4 macro string includes the step of generating the unique macro string based on the  
5 suggested macro string that is received.

- 1 5. The method as recited in claim 1, further comprising the step of compiling the  
2 computer program to generate an executable, including substituting the string in the  
3 executable for each instance of the unique macro string in the computer program.
- 1 6. The method as recited in Claim 1, further comprising the steps of:  
2 parsing a computer program to locate hard coded strings contained therein;  
3 creating and storing a mapping of macros to strings characters;  
4 in response to locating a string, determining whether a macro was previously  
5 generated for the string by searching the mapping; and  
6 generating a corresponding macro uniquely associated with the string only when a  
7 macro was not previously generated.
- 1 7. A method for transforming character strings that are contained in a computer  
2 program, the method comprising the computer-implemented steps of:  
3 identifying a hard coded string that is contained in the computer program;  
4 replacing the string with a macro that is uniquely associated with the string;  
5 creating and storing a macro definition in a macro file that defines an association of  
6 the macro and the string; and  
7 referencing the macro definition in a program element that is associated with the  
8 computer program using a compiler directive that causes a compiler to include  
9 the macro file during compilation of the computer program.
- 1 8. A computer-readable medium carrying one or more sequences of instructions for  
2 transforming character strings that are contained in a unit of code, wherein execution  
3 of the one or more sequences of instructions by one or more processors causes the one  
4 or more processors to perform:  
5 identifying a hard coded string that is contained in the computer program;  
6 replacing the string with a macro that is uniquely associated with the string;  
7 creating and storing an entry in a mapping that defines an association of the macro  
8 and the string; and

9           referencing the mapping in a program element that is associated with the computer  
10           program.

1    9.    The computer-readable medium as recited in Claim 8, wherein the step of identifying  
2           a string further comprises the steps of:  
3           identifying one or more computer programs that contain one or more hard coded  
4           strings; and  
5           parsing one of the computer programs to identify the hard coded strings while  
6           copying instructions from the one of the computer programs to an output.

1    10.   The computer-readable medium as recited in Claim 8, wherein the step of identifying  
2           a string further includes the steps of:  
3           parsing a computer program to locate hard coded strings contained therein; and  
4           in response to locating a string, determining whether a macro was previously  
5           generated for the string, and generating a corresponding macro uniquely  
6           associated with the string only when a macro was not previously generated.

1    11.   The computer-readable medium as recited in Claim 8, wherein the step of identifying  
2           a string further includes the steps of receiving a suggested macro string for the  
3           identified string of characters, and wherein the step of replacing the string of  
4           characters with a unique macro string includes the step of generating the unique  
5           macro string based on the suggested macro string that is received.

1    12.   The computer-readable medium as recited in Claim 8, further comprising the step of  
2           compiling the computer program to generate an executable, including substituting the  
3           string in the executable for each instance of the unique macro string in the computer  
4           program.

1    13.   The computer-readable medium as recited in Claim 8, further comprising the steps of:  
2           parsing a computer program to locate hard coded strings contained therein;  
3           creating and storing a mapping of macros to strings characters;  
4           in response to locating a string, determining whether a macro was previously  
5           generated for the string by searching the mapping; and

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6 generating a corresponding macro uniquely associated with the string only when a  
7 macro was not previously generated.

1 14. A computer system for transforming character strings that are contained in a  
2 a memory;  
3 one or more processors coupled to the memory;  
4 a conversion mechanism;  
5 a stored mapping that defines one or more associations of macros and strings;  
6 one or more sequences computer instructions contained in the memory and associated  
7 with the conversion mechanism which, when executed by the one or more  
8 processors, cause the one or more processors to perform the steps of:  
9 identifying a hard coded string that is contained in the computer program;  
10 replacing the string with a macro that is uniquely associated with the string;  
11 creating and storing an entry in the mapping using the macro and the string;  
12 and  
13 referencing the mapping in a program element that is associated with the  
14 computer program.

1 15. The computer system as recited in Claim 14, wherein the step of identifying a string  
2 further comprises the steps of:  
3 identifying one or more computer programs that contain one or more hard coded  
4 strings; and  
5 parsing one of the computer programs to identify the hard coded strings while  
6 copying instructions from the one of the computer programs to an output.

1 16. The computer system as recited in Claim 14, wherein the step of identifying a string  
2 further includes the steps of:  
3 parsing a computer program to locate hard coded strings contained therein; and  
4 in response to locating a string, determining whether a macro was previously  
5 generated for the string; and generating a corresponding macro uniquely  
6 associated with the string only when a macro was not previously generated.

